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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,202	10/27/2003	Marlow C. Jordahl		3856

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EXAMINER

VERBITSKY, GAIL KAPLAN

ART UNIT	PAPER NUMBER
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2859

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/694,202	Applicant(s) JORDAHL, MARLOW C.	
	Examiner Gail Verbitsky	Art Unit 2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 10-14 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☒ Claim(s) 1-9 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. This application contains claims 1-9 drawn to an invention nonelected in Paper filed on December 19, 2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10, 12-14 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchinson (U.S. 6393312) in view of Moscal (U.S. 5615953).

Hutchinson discloses a boiler (steam generator/ water heater) 10 having a heater 15 inside and a heating medium (water/ steam). The boiler has a temperature sensor and a flow sensor to control the heater temperature. Hutchinson states that the heater surface is susceptible to build-up of calcium (accumulation) on its surface.

Although Hutchinson states that the walls of the boiler are susceptible to build-up accumulation, Hutchinson does not explicitly teach to detect the build-up accumulation (altered state).

Moscal teaches that temperature profile of bank tubes of a boiler is indicative of deposit accumulation on the tube.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Hutchinson, so as to measure temperature profile of the tubes, as taught by Moscal, so as to determine if there is a temperature related accumulation (build-up/ deposit) of calcium on the tubes, so as to minimize the accumulation, in order to protect the device from damage.

4. Claim 11 is finally rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchinson and Moscal as applied to claims 10, 12-14 above, and further in view of Witt et al. (U.S. 6428627) [hereinafter Witt].

Hutchinson and Moscal disclose the device as stated above in paragraph 3.

They do not teach that the device can be a dishwasher, as stated in claim 11.

Witt states that a heater tube to a dishwasher is susceptible to mineral build-up causing failure of a heating element.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Hutchinson and Moscal, so as to measure temperature profile of the tube of the heater being a part of the dishwasher, as taught by Witt, so as to determine if there is a temperature related accumulation (build-up/ deposit), because heaters of dishwashers are susceptible to build-up which can cause failure of the heater.

Response to Arguments

5. Applicant's arguments filed on December 19, 2004 have been fully considered but they are not persuasive.

Applicant states that the present invention is different from Moscal in that Moscal is positioning the temperature-sensing device near, not touching the heated surface of the boiler. This argument is not persuasive because this limitation (touching the surface) is not stated in claim 10. It is the claims that define the claimed invention, and it is claims, not specification that are anticipated or unpatentable. Constant v. Advanced Micro-Devices, Inc., 7 USPQ2d 1064.

Applicant states that the device of the present invention can be situated anywhere in a liquid system (as apposed to Moscal). This argument is not persuasive because this limitation (the particular location of the device) is not stated in claim 10. It is the claims that define the claimed invention, and it is claims, not specification that are anticipated or unpatentable. Constant v. Advanced Micro-Devices, Inc., 7 USPQ2d 1064. Applicant claims " a temperature sensor to monitor and detect changes in temperature within the tube", not necessarily positioning the sensor within the tubes.

Applicant states that Moscal teaches to calculate deposit/ buildup accumulation as opposed to the device of the present invention, which is directed to measuring a change/ increase in temperature. Applicant also states that Moscal detects scale/ buildup on the surface of the heat radiating surfaces (as opposed to the present invention). These arguments are not persuasive because Moscal teaches to sense/ measure a temperature profile within tube banks (col. 4, line 9) and then to determine/calculate the deposit accumulation. Moscal senses temperature at different locations (temperature profile). It is inherently, means that the temperature change from one location to another would correspond to some abnormality. It is also known that

deposit build up is caused by temperature increase, thus, the temperature change sensed by Moscal, will, inherently mean, the temperature increase. Calculation of the deposit accumulation is an additional step to compare to the present invention.

However, the fact that Moscal does an additional step/ additional structure (while the present invention has less structure) does not differentiate Moscal from the present invention.

Applicant states that Witt is different in that Witt solves the problem of deposit/ buildup accumulation differently. This argument is not persuasive because, in the rejection on the merits, the Examiner uses Witt only for it's teaching that dishwashers suffer from the problem of deposits as well as boilers.

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2859

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Any inquiry concerning this communication should be directed to the Examiner Verbitsky who can be reached at (571) 272-2253 Monday through Friday 8:00 to 4:00 ET.

GKV

Gail Verbitsky

Primary Patent Examiner, TC 2800



February 18, 2005